

# Supporting Citizen-Centric Government with Intel® Core™ Processors

The State of Michigan enhances mobile productivity and brings services directly to citizens by deploying new tablets and 2 in 1 Ultrabook™ systems



“By enabling greater mobile productivity among our employees, the State of Michigan can provide more citizen-centric government services.”

— David Behen,  
CIO and Director,  
Department of Technology  
Management and Budget,  
The State of Michigan

Home to approximately 9.9 million people, the State of Michigan is dedicated to capitalizing on technology to deliver a broad array of citizen-centric services. The state recently launched a pilot program to deploy a wide variety of new mobile devices to employees across multiple government agencies. The new devices—including tablets and 2 in 1 Ultrabook™ systems—all use Intel® Core™ processors, which deliver the performance for enterprise-grade applications while helping improve energy efficiency. The state now gives agencies the flexibility to select from several device types while cutting costs by eliminating the need to deploy multiple devices per employee.

## Challenges

- **Enhance citizen-centric government.** Deliver government services directly to citizens by equipping government employees with mobile devices that accommodate a full range of work functions.
- **Improve mobile productivity.** Enable mobile employees to efficiently collect data, access information, generate reports, and more, without having to return to the office.
- **Support a diverse array of agency requirements.** Offer a wide selection of device types and models to support mobile employees whether they are providing health and human services in a citizen's home, making a traffic stop in a police cruiser, or inspecting a dairy farm.
- **Reduce costs.** Eliminate the need to deploy multiple devices for each mobile employee.

## Solution

- **Mobile devices with Intel Core processors.** The State of Michigan is deploying tablets and 2 in 1 Ultrabook systems equipped with Intel Core processors. The devices run Windows\* 8.1 Enterprise and use a variety of applications required by each agency.

## Technology Results

- **Robust performance.** The Intel Core processor-based mobile devices provide the performance to run enterprise applications and deliver a responsive user experience.
- **Energy efficiency.** Several of the devices provide all-day battery life and rapid recharging.
- **Streamlined management.** IT can manage a large number and variety of devices through a single enterprise management platform.

# Intel® Core™ processors help the State of Michigan enhance mobility without sacrificing performance



"Using a combination of Intel® Core™ processors, a 64-bit OS, a decent amount of memory, and solid-state drives, these devices can deliver a very robust, responsive user experience across applications."

— John McQuaid,  
IT Manager,  
State of Michigan

## Business Value

- **Improved citizen service.** State employees can better serve citizens directly, without requiring citizens to travel to government offices for assistance.
- **Increased flexibility.** Agencies can choose from a broad selection of devices to give employees the right tools for their jobs.
- **Reduced costs.** The State of Michigan anticipates saving money by eliminating the need to supply employees with multiple mobile devices and by reducing the physical office space required for mobile employees.

## Advancing a New Vision for Mobility

"One of our priorities in the State of Michigan is to bring services directly to citizens," says David Behen, CIO and director of the Department of Technology Management and Budget (DTMB). "Providing new mobile productivity tools to more of our 47,000 employees will help us better serve citizens and deliver on our promise of citizen-centric government."

Fostering greater mobile productivity will also help accommodate new ways that employees want to work. "People bring expectations about technology from their personal lives into their work lives," says Rod Davenport, CTO for the State of Michigan. "State employees want to use mobile devices to work anytime, from anywhere. By supporting that level of mobility, we can help employees be more productive and boost work satisfaction."

## Facing Multiple Challenges

The DTMB had been deploying laptops and Apple iPad\* tablets to government agencies for several years. "Caseworkers in our Department of Human Services use iPads to complete tasks while they are meeting with children and families, instead of waiting to return to their offices," says Tiziana Galeazzi, senior executive assistant to the CIO. "Our state troopers rely on laptops in their vehicles to get information quickly and stay productive while they are out on patrol."

Though the existing deployments demonstrated the value of mobile productivity, the DTMB decided to make changes in the types of devices and operating environments it provides.

"The iPads work well for filling out forms and viewing information. But some employees need to do more," says Phillip Jeffrey, CFO of the State of Michigan. "We needed to provide more employees with a complete Windows environment and full-functioned enterprise applications."

The state initially implemented desktop virtualization software to give iPad users secure access to agency applications and resources that couldn't be provided directly through the Apple iOS\* operating system. "Unfortunately, it wasn't a great experience for users," says Galeazzi. "We needed a way to provide a more native, responsive experience, and that required moving to devices that could support a Windows operating system."

In 2014, the DTMB launched a pilot program to evaluate new mobile devices. A key priority was supporting numerous agency and user requirements. "We have 21 agencies, and their mobile employees are responsible for a wide variety of functions, from protecting citizens and providing foster care to building roads and inspecting dairy farms," says Behen. "While police officers need rugged devices with keyboards, employees in the Department of Natural Resources, for example, are better served with lightweight tablets. We have to accommodate all user and agency needs."

### **Standardizing on Intel Core Processors**

As part of the pilot program, the DTMB decided to offer agencies multiple device types, including tablets and 2 in 1 Ultrabook systems. Current approved device models include Lenovo Yoga\*, Helix\*, and X1 Carbon\* 2 in 1 Ultrabook systems plus Microsoft Surface Pro\* tablets and Panasonic Toughpad\* tablets. With the 2 in 1 Ultrabook systems, mobile employees have the flexibility to use systems as laptops when they need full keyboards or as tablets when they use touch-enabled apps. Keyboards can be detached for situations when portability is the highest priority.

The Lenovo X1 Carbon and Panasonic Toughpad use Intel Core i5 vPro processors while the Lenovo Helix uses Intel® Core™ i7 vPro™ processors. The other devices use Intel Core i5 processors. All run the 64-bit version of the Windows 8.1 Enterprise operating system. "Using a combination of Intel Core processors, a 64-bit OS, a decent amount of memory, and solid-state drives, these devices can deliver a very robust, responsive user experience across applications," says John McQuaid, IT manager for the State of Michigan.

The state deploys the Lenovo Helix with Intel Core i7 vPro processors for employees doing more processor-intensive work. "For graphics-heavy applications used by state engineers and others, we've found we can provide systems with Intel Core i7 vPro processors that rival much larger, previous-generation workstations," says McQuaid.

The state uses the Intel® Demo Depot Program to evaluate tablets and Ultrabook systems before making purchase decisions. "We know we can rely on the Intel team to share their vision for the future, launch pilot projects such as this one, and overcome any hurdles that we might encounter along the way," says Behen.

### **Gaining the Flexibility to Support Diverse Needs**

By offering a diverse selection of mobile devices, the DTMB can accommodate a variety of agency requirements. "By adopting Intel Core processors and the Windows 8.1 Enterprise operating system as our standards, we have the flexibility to choose from a broad array of device types and form factors," says Behen. "Whether our mobile employees need lightweight tablets, 2 in 1 Ultrabook systems, or something else, we can give them the tools they need to be successful."

### **Lessons Learned**

To keep up with a rapidly changing mobile device landscape, the State of Michigan's Department of Technology Management and Budget understands that the evaluation of new products must never stop. "New mobile devices are appearing in the marketplace all the time, but not all devices are created equally," says Tiziana Galeazzi, senior executive assistant to the CIO. "We continuously evaluate new technologies to make sure we integrate only the best, enterprise-grade solutions into our environment."

**Standardizing on Windows 8.1**  
Enterprise enables support for touch-based devices as well as more traditional PCs. In addition, it helps control the management complexity that can arise from supporting multiple device types. "We're able to manage all of these devices within our existing Microsoft System Center Configuration Manager\* environment," says McQuaid. In the future, the DTMB could take advantage of the remote management capabilities built into Intel vPro technology to streamline remote diagnostics and remediation, patch management, and other administrative functions for systems using Intel Core vPro processors.

### **Reducing Costs**

The new mobile device program could help save the state money by reducing the number of distinct devices each employee uses. "After we started providing iPads, we found that employees still required smartphones and laptops for work," says Jeffrey. "By deploying devices that support full-featured Windows environments, we hope to eliminate the need to supply multiple devices to each employee."

As more employees spend more time in the field, the state might also be able to reduce the overhead for typical office environments. "We are actively assessing how our buildings are occupied so we can make them more efficient," says Galeazzi. "We can save money by implementing shared desks for mobile workers who no longer need to come into the office more than a few times per week."

### Improving Productivity and Delivering Citizen-Centric Government

The new devices are helping to significantly improve mobile productivity for state employees. "In the past, many mobile employees had to take notes in the field, and then return to the office to enter that information into an application. They were duplicating work—it was inefficient and error-prone," says Jeffrey. "Now they can use a highly portable mobile device to enter information directly into an enterprise application. They can do more work, more accurately and efficiently than before."

"By enabling greater mobile productivity among our employees, the State of Michigan can provide more citizen-centric government services," says Behen.

"From the caseworkers overseeing foster care to agricultural inspectors helping to ensure food safety, our workers can collect information, access resources, and process reports more readily in the field. As a result, they deliver faster responses and better overall service."

### Receiving Positive Feedback

The employees who have received the new devices praise the ability to get more work done when they are on the move. "The feedback from agencies has been very positive," says Galeazzi. "Users definitely enjoy having a full Windows desktop experience in a lightweight mobile device while they're out in the field."

Employees report that the new devices deliver significantly better performance than the previous-generation laptops and iPads they are replacing. "Users recognize the improved performance right away," says McQuaid. "And the executives who try the new devices quickly understand how that performance can help enhance productivity."

Mobile employees also have reported exceptional battery life and rapid recharging with the new devices.

"I've been able to work more than nine hours without having to plug in my new device," says McQuaid. "And it's fully charged again within about 45 minutes."

### Looking Ahead

What began as a limited pilot program is quickly expanding. The DTMB plans to expand the program to more agencies. With help from Intel, the DTMB will also keep evaluating new device types and models as they become available.

The state expects the new devices not only to improve existing services but also to support new, innovative ones. "Employees could take advantage of location-awareness capabilities to identify safer, more efficient routes to citizens," says Davenport. "Meanwhile, the Department of Natural Resources could provide citizens with electronic hunting and fishing licenses without requiring them to deliver paper forms to state offices. We're limited only by our imagination."

Find the solution that's right for your organization. Learn more about tablets and 2 in 1 devices for business by exploring **IT Center**, Intel's resource for the IT industry. View success stories from your peers: **Business Success Stories for IT Managers**.



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